DOCUMENT RESUME

ED 221 537

SP 0216103

AUTHOR TITLE Griffin, Gary A. Staff Development.

INSTITUTION

National Inst. of Education (ED), Washington, DC.

Teaching and Learning Program.

PUB DATE

NOTE

Feb 82
36p.; Paper presented at the National Invitational
Conference, "Research on Teaching: Implications for
Practice" (Warrenton, VA, February 25-27, 1982). For
related documents, see SP 021 097-107 and ED 218

257.

EDRS PRICE DESCRIPTORS

MF01/PC02 Plus Postage.

Annotated Bibliographies; Educational Quality; Educational Trends; Elementary Secondary Education; Higher Education; *Inservice Teacher Education; *Program Design; *Program Effectiveness; *Program Evaluation; Research Utilization; *Staff Development;

-y x 44

Teacher Education Programs; Teacher Workshops

ABSTRACT

Selected research studies which have potential utility for and impact upon the conduct of staff development programs in school settings are reviewed in this paper. The context, assessment, content, and process of staff development programs are defined, and 27 validated studies are introduced and discussed. Trends in findings are noted, and gaps in research areas are identified. Eight elements of a suggested research-derived staff development program, which features participatory decision making, peer support, and responsive program planning, are outlined. An annotated bibliography of the 27 studies is appended. (FG)

STAFF DEVELOPMENT

Paper Prepared for the NIE Teaching Synthesis Conference Airlie House, Virginia February 25-27, 1982

Gary A. Griffin
Research and Development Center for Teacher Education
The University of Texas at Austin
Austin, Texas

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

√ This document has been reproduced as received from the person or organization originating it.

originating to

1 Minor changes have been made to improve reproduction quality.

 Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

STAFF DEVELOPMENT

Paper Prepared for the NIE Teaching Synthesis Conference Airlie House, Virginia February 25-27, 1962

Gary A. Griffin
Research and Development Center for Teacher Education
The University of Texas at Austin
Austin, Texas

Introduction

The purpose of this paper is to review selected research studies which have potential utility for and impact upon the conduct of staff development programs in school settings. Although I know that subsequent activities will focus upon the issue of utility, my own orientation toward school/teaching research is to consider possible utility when examining any research effort. Consequently, some sections of this paper may anticipate the basic questions which will, in the future, be asked of the content herein. Also, this perspective regarding schooling/teaching inquiry acts as a screen through which certain research activities are filtered.

For this paper, staff development is conceived of as being any systematic alrempt to promote change on the part of school persons. In most instances, these changes are directed toward teachers. In some, however, they are addressed to administrators. The changes may be of differing magnitude and degrees of impact. For example, there is a major variation of both magnitude and impact between an attempt to introduce a new means of teaching (and learning) mathematics (e.g., the "new math") and one which focuses upon a minor alteration in teaching strategy (e.g., increasing the instances of positive feedback given to a particular student). The new mathematics requires not only the understanding of a new conception of what mathematics is and can do but also requires a new way to deliver to students that new way of looking at number. For the increase of positive feedback to

one student, it can be safely assumed that the teacher already knows about and can engage in this activity and the change in his/her behavior already has a base upon which to build increased consciousness. The "character" of the staff development effort, then, is an issue to be considered in terms of the utility of the studies and issues noted in this paper.

Utility is a concept which, on the surface, appears to be a relatively simple one but, upon more extensive examination, turns out to be considerably more complex than originally imagined. Typically, utility only means answering the question, "How can this be used?" That question, however, masks several other important questions related to utility. A much more comprehensive, and to me more reasonable, question to ask would be, "Who, under what conditions, with what support systems, and with what intentions and anticipated consequences could use the findings from this research?" Carefully constructed (and examined) answers to the latter question would delimit considerably certain of the research-to-development- to-policy dilemmas which face school persons with increasing frequency. (Consider, for example, the staff development implications of a decision by a board of education, after reading the Beginning Teacher Evaluation Study (BTES) report, to mandate increased Academic Learning Time (ALT) in all subjects, for all students, across all grade levels. This, by the way, is not an imaginary illustration.)

An examination of the body of this paper will reveal two interacting phenomena: (1) my own biases regarding staff development (what it should be, what it can be, what it has been) and (2) the relatively small number of studies which have been selected for inclusion. The first is always present in a paper of this kind. The number of studies, however, reflects several influential problems of the field. That there are so few conceptually

2

4

elegant and methodologically rigorous research studies related directly to "
staff development is surprising to some in that staff development has been a
persistent practice in schools. It is a rare school system, for example,
which does not have some sort of "inservice education" program. (The
character and quality of such typical teacher growth activities will not be
discussed here.) If the practice is so pervasive of schools, why is it so
little understood from a research perspective?

Several explanations can be advanced. I believe that the complexity of the phenomenon (staff development) is such that the methodological problems associated with studying it are of such a magnitude that the research community has only lately been willing (and able) to address it with any assurance of learning about it. As an illustration, one need only to consider the myriad interconnecting parts of a staff development effort: the people and their personal and professional characteristics, the nature of the setting, the elements of the program itself (planning, implementation, decision-making regarding purposes), the role of support services and materials, behaviors of participants, perceptions of benefit/deficit, evaluation, and the interaction of all of the above. This list could be longer but it serves the purpose of demonstrating why many research colleagues have shied away from systematic study of staff development.

A second explanation emerges from the school community. Over the past several decades schools have frequently served as research sites. That is, a university or other research-oriented institution member <u>uses</u> the school, or persons in it, as objects of research attention. More often than some of us consider desirable, this use involves the adaptation of the setting to the researcher's purposes (e.g., breaking up large groups into small groups, isolating curricula, extending an instructional period beyond its normal

length of time, etc.). These adaptations serve the researcher's purpose but do <u>not</u> serve the school's or the teacher's. Too often, the result of this practice is a passive (if not active) aversion by school people of research activities.

A third explanation of the relatively meager body of studies of staff development is a consequence of the interaction of the schools' interests and the researchers'. School people, quite reasonably, expect that research efforts should result in some recommendations for practice which can be seen as better than "business as usual." Further, they expect that these research products should be available to them in a reasonable length of time and in a form that is usable and comprehensible. The conventions of the research community, however, often mitigate against satisfying these expectations. It is variously estimated that the translation of research findings into practical applications (development) takes from six to twelve years. In the interim (which may be less an interim than a terminal point), the research is reported in journals, at professional meetings, and among like-minded colleagues in both form and language which is outside the repertoire of teachers and administrators. This series of events (or nonevents) lessens considerably the credibility, the perceived utility, and the use of research as a powerful impact upon practice.

Organization of the Paper

This paper is organized around issues which, to me, are important considerations in the planning, conduct, and evaluation of staff development programs. Research which relates to these considerations is reported and discussed. The issues which have been selected as organizers include context, assessment, content, and process. The paper concludes with a research-derived profile of an "ideal staff development effort.

.

O

Appended to this paper is an annotated bibliography which includes the studies discussed below and provides brief descriptions of each.

Studies of Selected Staff Development Issues

A brief rationale for the decision to include some staff development issues and exclude others is in order. Obviously, if an issue has received no research attention it has been excluded. And, equally obviously, if an issue has been studied from an inadequate conceptual base or with inappropriate methods, it also is not a part of this discussion. What are included are studies which are both conceptually and practically supported and which have been conducted with sejentific rigor.

Briefly, the areas of interest which focus the discussion are ones which have been shown, by research and through careful decades-long observation, to be critical to the staff development enterprise. Context, the interacting phenomena which surround and pervade staff development, is central to "doing" staff development. It is now axiomatic (although this has certainly not always been the case) that the characteristics of the settings in which teachers and others are expected to change their behavior are influential upon the success of the change efforts. Context includes, not only the physical and/or organizational properties of the setting but also the histories, influencers, missions, and capabilities of the setting. Assessment refers here not to a conventional needs assessment but a careful examination of observed and perceived needs. It also includes a process of applying judgment as to the degree to which what is needed/desired can or should become an object of staff development. This process, if conducted carefully and systematically, might suggest that some antecedent conditions must be created before the needs can be acted upon in some potentially fruitful way. The contept of staff development can be (and is) widely varied -- from large-scale efforts at changing a system to activities aimed at altering relatively small parts of a few teachers' repertoires. The <u>process</u> of staff development refers to the components of the delivery system which is used to convey the content to the participants and to the decisions and actions which are related to the planning, implementation, and evaluation of both content and delivery system.

Context

During the past decade the influence of context upon staff development has received increased attention from the research community. Some of this attention was intentional (that is, planned for) and some of it emerged as a consequence of attempts to understand other staff development insues (unanticipated outcomes). The overall conclusion reached by many, including this author, is that the power of the context to influence staff-development can not and should not be underestimated. Some studies which support this belief are discussed below.

Barth (1972) used the case soldy method to report on an attempt to move an inner-city school from a traditional stance to one which delivered instruction according to principles of open education. Despite the good will and the strong commitment of the change agents (university staff and students), the effort to change the structure of the organization and the behavior of the staff members failed. Explanations of the failure are rooted in the lack of understanding of the degree of influence exerted by the school, its history, the perceptions and expectations of the immediate community, and the conventions of teaching and learning held by staff and students. Although one could accuse Barth and his colleagues of naivete, the knowledge that the context of schooling can (and does) promote or detract

D

from improvement efforts is still not widespread in the educational community.

Berman and McLaughlin (1975) expand upon this motion of context influence and, to a degree, give it some legitimacy as a natural phenomenon in their report of the consequences of Federally-supported programs of school change. Their concept of <u>mutual adaptation</u> describes the process by which the setting is influenced (and changed) by the innovation and, conversely, how the innovation is influenced (and changed) by the setting. Prior to the acceptance of this notion by innovators and adopters, it was assumed that an attempt to cause a change had failed if the features of the innovation, as envisioned by its developers, were not intact in the setting. Mutual adaptation suggests a causative interaction which is natural and logical. The staff developer who accepts this conclusion is likely to plan for it by allowing possible variations in his/her plan for action and judge his/her efforts less by the presence/absence of the intended program than by the degree of presence.

Griffin and Lieberman (1974) reviewed landmark studies of leadership and organizations in order to derive a set of indicators which, based upon prior research, could be used as possible predictors of innovative behavior by school persons. (For the purposes of this paper, the school persons to be attended to are staff developers.) The review revealed that certain context-related issues could be inferred as predictors. Among these were the ability to analyze and understand the institutional variables which impinge upon the staff development efforts. This includes knowledge of the system and the subsystems as well as the relationships between and among them, gathering and acting upon information about the history of the organization, the "openness or closedness" of the organization in systems theory terms, and theability to

coordinate these organizational variables so that they support the change effort.

A primary variable in the context of staff development is the nature of the leadership available (or necessary to develop). Conceptually, the inclusion of leadership in a discussion of context sometimes causes difficulty. If, however, one considers the people and the setting as interactive and mutually reinforcing, it is essential to give attention to "who is in charge here." Certainly, the discussion immediately above suggests that someone is responsible for understanding and acting upon context variables in innovative and productive ways. Several studies offer support for certain leadership characteristics and/or behaviors which can be inferred to be necessary for staff development success. Gross, Giacquinta,. and Bernstein (1971), studying an attempt to change teacher role functions, noted the importance of supportive leadership in effecting the change. Although the rhetoric of the leadership literature exhorts the leader to be the "key agent for change" or the "instructional leaders" or the "facilitator for teachers," the staff development research more often than not indicates that school leaders (i.e., principals) are not. Hord, Thurber, and Hall (1981) report on a program designed to help school administrators learn how to lead. Based on the theoretical and practical knowledge gained from years of research related to the Concerns-Based Adoption Model (CBAM), the study demonstrates that school administrators, given appropriate analytical and intervention tools, can provide supportive guidance to school staffs.

The five-year study of school change conducted by the Institute for the Development of Educational Activities (I/D/E/A) under the leadership of John Goodlad resulted in a set of inter-related findings which are reported in several volumes. Reporting on the étudy and its principal findings, Bentzen

(1974) offers considerable support for the conclusion that a supportive context is related to disposition for change. The nature of this supportive setting, largely influenced by a school principal's behavior, includes the support systems, the predispositions of participants, the expectations of participants for practice, the perceptions of participants regarding past successes and failures, and the availability of assistance and rewards from influentials inside and outside the system or school.

Context is treated somewhat differently in research about alternate institutional settings where development is to take place. Although teacher centers are often located in conventional school places, the ideas which support and guide teacher centers suggest that a reconstitution of the site takes place. (Often, of course, teacher centers are located in "neutral" territory, particularly when they are a consequence of collaborative efforts between and among institutions such as colleges, public schools, and teacher organizations.) Devaney (1975) reports that a more flexible use of time (a context variable) and the designation of a place where adults meet with other adults about professional issues are related to successful teacher centers. These context considerations are certainly important to have in mind when planning certain staff development efforts.

Related to several of the findings reported above are the ones from Little's (1981) study of school success and staff development. Using a focussed ethnographic methodology, Little and her colleagues noted the importance of contextual variables such as the nature of the principal's interaction with teachers (in staff development activities), the "ethos" of the school in promoting certain beliefs about teaching, and the power of the school context to promote or hinder staff development efforts.

In summary, context issues which have been related to staff development and change efforts, for good or ill, include:

- the norms of the setting (institutional regularities)
- the history of the organization
- perceptions and expectations of school persons regarding practice
- perceptions and expectations of community members
- mutual adaptation of the school and the desired change
- ability or loaders (and others) to analyze the characteristics of the setting
- knowledge of the system (and subsystems) by leaders
- coordination of organizational variables by leaders
- supportive leadership
- ==adult=adult=interactions-(including-the-principal)
- flexibility in use of space and time

Assessme<u>nt</u>

Staff development programs are most often planned and implemented as a consequence of some diagnosis, formal or informal, of what an institution or members of an institution "need" to know about or how to do. Although not supported by systematic research, it is the judgment of many observers of schools that the determination of what staff development should consist emerges most often from the judgmental perceptions of an authority figure in the institution. (Lest the reader think that I am talking only about the old-school notion of a superintendent's or principal's dicta being put into place, there is evidence in practice that teacher organizations, governmental agencies, and other institutions use the same practice.)

In light of the teacher militancy movement and the aura of social change which characterized much of the past two decades, it would seem likely that

10

.

research into what all parties to the action believe necessary for school and teacher growth and change would have been conducted regularly and with some degree of persistence. This is not the case. The literature on staff development, not unlike that of other school-related activities, abounds with propositions, idiosyncratic or generally believed to be so, for what staff development should be and do. These propositions, with few exceptions, are not research-derived. Some, however, might be consider research-related in that systematic and rigorous methodological procedures are used to support conclusions. These propositions usually emerge from what have come to be called "needs assessments." (A new term, "needs sensing," has entered the arena of schooling. This seems to mean some less formal mode of drawing inferences by leaders or other "experts" regarding what should be done in a given situation.)

There are, however, instances where staff development programs are based on research-derived conclusions, generalizations, and propositions. Byrd (1981) attempted to determine whether or not there was any general agreement about what professional development programs should be and do. The research proposition was that it was necessary and desirable to determine the degree to which certain objects of staff development attention are considered important by teachers, administrators, and teacher educators. Using a survey methodology, Byrd found that teachers disagreed with teacher educators and administrators, the latter two groups considered together. Administrators and teacher educators believed that teachers needed greater skill in planning, diagnosis, instruction, classroom climate, and evaluation. The teachers in the survey sample did not agree. The total sample did agree, however, on the need for greater understanding and skill related to issues in

11

the affective domain, classroom control, and elimination of inappropriate student behavior.

Another survey by Christensen (1981), with a somewhat different focus, attempted to determine what teachers perceived as their preferred mode of delivery of staff development. Although there appeared to be no clear-cut response to the question, it was noted that a variety of delivery modes is considered desirable (e.g., workshops, observations, sabbatical leaves, college courses). Further, it was noted that institutional collaboration was considered necessary to meet teachers' expectations. (See the brief discussion of teacher centers above.)

The work of Hall and associates in the Concerns-Based Adoption Model (CBAM) research has implications for both nature and mode of delivery of staff development programs. Although it is important to acknowledge that CBAM research has not, to this date, developed a prescriptive focus, the diagnostic tools which have been developed have obvious logical relationships to assessing the needs of a setting in relation to staff development. Hall (1979) discusses the concept of Stages of Concern (i.e., what an individual thinks of his/her relation to a desired or mandated change) and its implication for staff development. Interventions based upon the concerns expressed by organizational members are discussed and certain caveats are advanced. The staff developer who is sensitive to the concerns of his/her colleagues, it is logical to assume, is likely to plan programs (interventions) which do not fly in the face of or ignore those concerns. (The Stages of Concern include awareness, informational, personal, management, consequence, collaboration, and refocusing.)

In related work, Hall and Loucks (1981) use the term "innovation configuration" as a way to examine, explain, and act upon different ways

12

14

users adopt (or do not adopt) an innovation. This mode is promoted as a decision-making tool for planning, implementing, and evaluating programs designed to facilitate adoption of innovations.

A third CBAM research strand considers the ways people actually <u>use</u> an innovation. These Levels of Use are presented as a developmental model which can be critical bodies of information for the planning and implementing of staff development programs (Hall, Loucks, Rutherford, & Newlove, 1975). The Levels of Use correspond, to a large degree, to the Stages of Concern discussed above. The levels are non-use, orientation, preparation, mechanical use, routine use, refinement, and renewal.

It is hypothesized by this author that the CBAM system for understanding any planned attempt to change persons and organizations can be used by staff developers as assessment tools to insure that professional growth programs are appropriate and necessary.

The issue of assessment is confounded by the lack of instrumentation to use in determining what should be attended to by staff development. Medley, Coker, Lorenta, Soar, and Spaulding (1981) attended to this issue by testing the feasibility of constructing new keys to already existing observation schedules to determine if teacher competencies could be assessed reliably with the new system. Interestingly, the new keys-were based upon what a sample of teachers believed to be important competencies for themselves and their colleagues. Although it was found that the new keys did not function reliably across all competencies, it is encouraging to note that stable reliability was found for a number of them. This research, essentially methodological, has important potential for assessing teachers' behavior as a means to inform decisions about staff development programs.

Although her model is based on a set of research-derived assumptions about teacher effectiveness, Stallings (1981) attends to the issue of assessment in her model of staff development. Using an observation schedule which focuses upon effectiveness variables, the model includes an initial assessment of teacher participants' use of certain behaviors as a baseline from which improvement strategies are formulated. The Stallings model is one of the few inclusive attempts to address the actual teaching behavior as an essential decision point in determining subsequent staff development activities.

Regarding assessment for staff development, then, research to date can be used to:

- determine whether teachers, administrators, and teacher educators agree as to what should be the focus of staff development
- determine preferred modes of delivering staff development
- diagnose concerns of participants
- determine levels of use of a desired/mandated change in practice
- infer appropriate interventions
- promote methodologically sound means of determing teacher competence
- establish a baseline from which staff development strategies can be formulated

Content

It is assumed that staff development programs are content-laden. That is, there is something to be learned, something necessary for participants to be skillful about, some sensitivity desired. The staff development literature, as noted earlier, is not dominated by research which is directly or indirectly applicable to engaging in the decision making necessary to formulate a sound program for school persons. This condition holds true for

14

13

•

the content issue. When one asks the question, "What is it that teachers or administrators should know or be able to do as a consequence of staff development?," the answers are more often than not situation-specific or highly propositional in character. Very seldom does the answer include the phrase "research suggests." (This is not necessarily an undesirable state of affairs, in my opinion. But, because this paper has as a focus the place of research in staff development, it may serve as an explanation for the relative brevity of this section.)

I take the position that there is now a body of research findings which can be used to form a large piece of the content of staff development programs. This body of information is commonly referred to as research on teaching. It has been noted by members of the research communit, as well as members of the schooling community that early studies of teaching were primarily descriptive in nature and, without the application of criteria to the descriptive findings, it was possible only to speculate upon what effective teaching might be. During the past decade, however, programmatic research efforts have identified strong relationships, correlational as well as cause-effect, between and among certain teaching behaviors and certain pupil behaviors and outcomes. It is my contention that these relationships are strong enough to be considered as content for staff development programs and, hence, certain of them are noted herein. (More detail about these studies and others will be a part of another paper prepared for this conference.)

Barnes (1981) reviewed studies of teaching and presents major findings from recent large-scale, classroom-based studies. She notes the limitations of the studies as means to decide upon the utility of their findings for settings other than the ones in which they were conducted and suggests

15

implications for that utility. Using criteria of methodological rigor. preservation of the naturalness of the settings in which the studies were conducted, precision and clarity of meaning for practitioners, and the relation of the findings to concerns and/or problems expressed by teachers and teacher educators, she selected fourteen studies for inclusion. These studies were correlational, experimental, and evaluative and covered a range of grade levels (though dominated by early elementary grades). Reflecting societal expectations and professional orientations, the studies concentrate upon the curriculum areas of mathematics and reading. She discusses findings which focus upon the learning environment. management of student behavior. classroom administration, prevention of misbehavior, reaction to misbehavior, preparing students for lessons, teacher presentations of lessons, student practice after presentation, evaluation of student learning, teacher interactions with students, and organization of instructional activities. Barnes concludes with a profile of an effective teacher based upon these studies.

Good (1982), in a commissioned paper designed to inform teacher educators about possible teaching findings as content for staff development, acknowledges that teachers do, indeed, make a difference in the lives of students. He also points out that there are arenas of research on teaching which are either ignored or, in some way, incomplete though promising. Good reviews many of the studies included in the Barnes paper discussed above. In addition, however, he points toward new directions for classroom research. Among these new directions are attention to curriculum issues as they relate to teaching, increased attention to the context in which teaching takes place, the task structure(s) of the-classroom, and student mediation.



As noted above, the content of staff development need not be research-derived. In fact, for many phenomena and in many puzzling situations, there is no research to support the inclusion/exclusion of content for staff development. It is possible, however, to examine the work of scholars such as are included in the Barnes and Good papers for high-success probability content and to use that material as the focus for staff development efforts. Processes

Any proposal for a staff development program has a central core of processes (or activities) which are meant to accomplish some desired ends. Much like the popular positivist positions regarding curriculum planning for schools and classrooms, it is assumed by many (if not most) staff developers that a good program plan must have gools/objectives, activities, and evaluation components. Certain of these processes have emerged from research as being effective "deliverers" of staff development. Several will be discussed here.

Berman and Friederwitzer (1981) argue for the inclusion of certain processes in their model of staff development. These processes are not atypical of other research in the field and, as such, can be considered as overarching themes. Voluntary participation is a theme which moves across many propositions and theories of staff development and has also been found to be related to positive outcomes of specific programs. The attention to teacher-administrator teams as a procedural requisite has always had an organizational common-sense to it but has received research verification as a predictor of staff development only recently (see also Bentzen, 1974 and Little, 1981). Likewise, the use of-adult developmental theory to guide the selection of activities has emerged only in relation to the growing legitimacy of the field of inquiry. The use of teachers as trainers shows up

in multiple sources, in addition to the one under consideration, as a process related to positive staff development outcomes (see also Devaney, 1975 and Bentzen, 1974). Released time for participants is also associated with effective staff development although Tikunoff, Ward, and Griffin (1979) noted that teachers were initially reluctant to be away from their classrooms, even though they believed that the reasons for their absence were important ones. Berman and Friederwitzer also confirm the positive effect of a focus upon an individual school setting (see Bentzen, 1974).

Berman and McLaughlin (1975) note the importance of concrete teacherspecific planning, in-class assistance, teachers observing other teachers,
participative governance, local materials development, and teacher-administrator interaction when looking at effective change programs. (It is assumed
by this writer that the change programs could be conceived of as staff
development programs.) Regarding the finding specifying in-class assistance,
Joyce and Flowers (1981) speculate from research findings that what they call
"coaching" increases in considerable degree the potential of attempts to
alter teacher behavior. They offer a taxonomy, based on reviews of research
in staff development, which suggests that increased positive effects are
found when a program moves from theory understanding to observations to
clinical practice to coaching. This inferential model is a potentially
powerful one for staff developers if it proves to be accurate.

The most typical staff development activity (or process) is the workshop. The workshop is usually a one-shot attempt to provide a stimulus strong enough to alter the behavior/beliefs/thoughts of participants. In a recent report, Emmer, Sanford, Evertson, Clements, and Martin (1982) discuss an experimental field study in which teachers were exposed to a treatment consisting of a workshop and a manual of teacher prescriptions as a means to

18



promote more effective classroom management. A meticulously conducted set of research procedures revealed that treatment teachers did, in fact, demonstrate more of the desired management behaviors than control teachers. When one considers that the workshop was only three hours in length, one looks for reasons other than the workshop to explain the effects. What may be overlooked in examining the research report is the important role played by the manual of prescriptions given to the treatment teachers. The manual is reality-based, situation-specific, written in a clear and forthright manner, and is varied in format to accommodate different ways of examining (and using) it. It is believed by this author that the attention to detail in the manual and the sensitivity to teacher concerns which guided its production are principal contributors to the success of workshop stimulus.

In a related investigation, Griffin, Hughes, and Martin (in press) documented the treatment of the Emmer et al. study. As a protection against the possibility that certain of the treatment teachers (notwithstanding the random assignment to treatment and control groups) might have had more knowledge of the management procedures to be included in the study, all teachers completed a questionnaire prior to their participation in the workshop. (Control teachers were also given an opportunity to participate in a classroom management workshop subsequent to initial data collection.) The responses to the questionnaire items, derived from a content analysis of the manual, revealed that treatment and control teachers did not differ significantly in their knowledge of the desired behaviors prior to participating in the study. In that treatment teachers demonstrated significantly more of the desired behaviors subsequent to the workshop and exposure to the manual, we can speculate that this treatment, unusual primarily because of the detail and specificity of the manual rather than because of the workshop format,

served as a powerful focussing device and, hence, was related to the positive outcomes of the experiment.

In the I/D/E/A study of school change, eighteen schools were studied extensively for a five-year period. Bentzen (1974), in reporting the results of that inquiry notes that there appeared to be a taxonomic set of processes operating in the schools which were most receptive to change and in which there was the most widespread involvement in change. She and her colleagues called these related processes DDAE -- dialogue, decision-making, action, and evaluation. Using both qualitative and quantitative methods, it was discovered that the school staffs talked about professional issues (dialogue), came to some decisions which were related to the talk (decision-making), engaged in some activity to carry out their decisions (action), and engaged in some formal or informal means to determine whether their actions dealt with the issues under initial consideration. These processes were believed to be central to the willingness and ability of school people to effect changes in their own behaviors and in their workplaces.

Another important finding from the work reported by Bentzen is what was called "the peer group strategy." Aligned somewhat with the adult-to-adult interaction discussed earlier in this paper, this phenomenon suggests that it is necessary and desirable for teachers and administrators to not just work together on problems of mutual interest but to consider it reasonable that most, if not all, of the solutions to their problems reside in themselves and in their environment. This is a marked shift from a conventional dependence upon experts to solve problems. It also mitigates, in large measure, against packages of solutions which might be placed whole into an unreceptive school environment. The peer group strategy is believed to be interactive with DDAE. That is, if people in schools talk, act, decide, and reflect together

in cyclical and repeated ways, it is likely that they will come to realize that, working together, they can come to reasoned solutions about their own concerns.

It is important to remember, however, that not all of the solutions to problems can be found in the immediate environment. Tikunoff, Ward, and Griffin (1979), reporting on a new-way to go about school-based_research and development (see below), acknowledge the critical part that technical assistance can play in dealing with difficult questions about teaching. They point out that technical assistance, used wisely and with a degree of economy, provides necessary technical and knowledge bases which are sometimes not a part of a school (or classroom) environment. The difference between technical assistance and the conventions of "asking the experts," is very important. Technical assistance, unlike asking for large-scale answers to complicated problems, assumes that the users have thought through the problem with enough detail and clarity to be able to formulate a precise question which they believe has some promise for treating a well conceptualized issue. The difference can be further demonstrated by juxtaposing two questions: "How can we raise our reading scores?" versus "What specific teacher monitoring behaviors were found in high Academic Learning Time classrooms?"

Interactive Research and Development on Teaching (IRADT) was a study designed to determine if teachers, researchers, and teacher educators could work together in a school-based team to engage in systematic and rigorous research and development activities focused upon problems/issues of teaching (Tikunoff, Ward, & Griffin, 1979). As the strategy was first conceptualized, it was looked at principally as an alternate mode of conducting research and engaging in development. The school-specific alternative was believed to be a reasonable means to change the face of much of the research on teaching

that was seen by teachers and other school persons as irrelevant and lacking in credibility. Also, it was conceived of as a means to reduce the research into practice time lag already acknowledged in this paper.

As IRADT was refined as an idea and as it was put into place, it was noted that this means of approaching school problems was, in addition to an alternate research approach, a potentially powerful intervention. The study of the practice revealed that school people and college/university persons changed as a consequence of their participation. Thus, it is believed that IRADT can be a powerful staff development vehicle. Some of the consequences of participation in IRADT include altered perceptions of options and possibilities for teaching and learning, increased collegiality, greater knowledge of and skill related to research, shifts in pedagogy and in research orientations, knowledge and skill benefits, and increased attention to knowledge utilization. Importantly, the IRADT strategy engaged school people in the identification and solution of problems acknowledged by themselves and their peers to be important.

From these studies, then, certain processes of staff development have been reported as beeing associated with positive outcomes. They include:

- voluntary participation
- teacher-administrator teaming and other professional collegial relationships
- the use of teachers as trainers
- provision of released time for participation
- concrete, teacher-specific plans
- teachers observing other teachers
- participative governance
- in-class assistance ("coaching")

22





- situation-specific supporting materials
- engagement in dialogue, decision-making, action, and evaluation related to school problems and issues
- acknowledgement that the school is an invaluable resource for problem-solving (peer group)
- the availability of technical assistance
- systematic attention by teachers to identifying and acting upon problems they perceive as being important ones

Profile of a Research-derived Staff Development Program

Although the studies cited above did not have the same intentions or use the same methodologies, in the interest of utility of findings it is intriguing to speculate upon what might emerge as the "ideal" staff development program if the findings were considered together. (There are, I know, conceptual and scientific risks to this undertaking. But, I agree with Ward (1982) that it is reasonable in an uncertain world to look for "indicators" which can be inferred from available knowledge and used to inform practice.) What follows, then, is a set of features which I believe to be consistent with research findings and which are logically consistent with what might be considered to be the problems and issues of staff development.

1. A staff development program will be designed as a consequence of systematic problem identification by those persons most directly related to the problem. The issue here is, to a degree, credibility but principally it is one of whether or not staff development is perceived as useful by participants in the process. Several of the studies included in this review point out the desirability of engaging teachers in looking at their worlds with situation-specific lenses. The days of the "quick fix," of course, are not over but there is strong evidence that it is safe to predict that the

actors are the ones to say that their costumes don't fit, that their lines are awkwardly phrased, or that the stage set is missing in certain essential details.

- 2. A staff development program will be interactive. From problem identification to governance through activities and reflection, it is a recurrent theme that effective change efforts are characterized not so much by a "do it to" but a "do it with" pattern. One can assume all sorts of underpinnings to this (e.g., theories of adult development, the deterioration of the athority system of old, the principle of ownership as a consequence of involvement, etc.) but many of these assumptions are still awaiting confirmation. What has been confirmed is that the interactive mode is related to effective professional growth activities.
- organization from pyramidal to flat. As colleagues work together across roles (e.g., principal and teacher) and their work is focussed on finding solutions together, the conventional hierarchical relationships tend to be lessened and new ones developed. Although the authority system may not change, the collegial system does. As teachers discover (or rediscover) their own power as experts, they tend to depend less on the conventional leader. As principals begin to convene with teachers over substantive and professional (as opposed to regulatory) issues, they tend to depend more on the teachers as decision-maker colleagues.
- 4. A staff development program will depend less upon external support
 systems and more upon internal ones for substantive and procedural guidance.

 Although the world of governance and bureaucracy abounds with meant-to-behumorous stories about "consultants," it is becoming clear to some of us that
 those stories may be less apocryphal than we had heretofore assumed. The

23

23

growing sense of efficacy among certain teachers, as groups and as individuals, suggests the power of that sense to inform not just pedagogical practice but staff development expectations and implementations as well. The issue of advocacy as a political instrument for gaining of political power can now be shifted to advocacy as a means to enter into, understand, and act upon one's own problems with like-minded colleagues. And, as participants in the process become more "in charge," it is likely that they will be more sharply aware of how external assistance can help them with their problems.

- 5. A staff development program will be formulated and monitored with the perceptions of the participants as central foci for decision making. Many of the research efforts discussed above are illustrations of ways that staff developers can become more sensitive to what and how organization members perceive their worlds and their work. Aligned with this conclusion is the one which suggests that staff development is effective when it is personspecific and situation-specific. Blending these two strands of meaning together leads one to the necessity for staff developers to be aware of the person in the process and to act upon that awareness.
- 6. A staff development program will be formulated, in part, in terms of a careful analysis of the organization and the people for whom it is intended. As we become more aware of the differences among organizations, as we have become aware of the differences among people, we realize the need to do a considerable amount of retooling. The implantation of programs, without considering where the implant is expected to take hold, appears, in light of the work cited here, to be foolhardy. The history of the people and their workplace, the expectations for practice and of consequences, the norms and sanctions believed to be present these and other issues will inform the

25

staff developer's work so that he or she does not end up as <u>modern day</u>

Procrustes.

- 7. A staff development program will be flexible and responsive.

 Although a plan for action and a set of intentions for that action will probably always be desirable, if only for purposes of economy of energy expenditure, the "ideal" staff development effort will be capable of a bit of bending and will, when necessary, revise its plan as a consequence of sensitive monitoring by leadership (see above): Staff developers must move away from the unyielding attention to the mentality of "but we have to do it this way" and move toward the modes of thinking that allow disequilibrium to inform their work.
- 8. A staff development program will be, within reasonable limits, situation-specific. A strand which appears again and again in the material cited in this paper is the relation of action upon immediate concerns to effective caff development. This is true of broad programs of institutional change and is also true of the materials and methods used to support the movement toward those changes. As staff developers work with others, it is incumbent upon them to relate the users' needs to the selection of strategies and methods. This attention to the often-decried notion of "What do I do on Honday" augers well for staff development efforts.

What I have done here, of course, is to begin speculating on the issue of utility. Certainly, others will have differing notions of how the staff development-related research can inform practice. And, equally certainly, I could advance other ways of looking at this research for the same purpose. To repeat, I know the intellectual pitfalls awaiting the person who speculates as I have done immediately above -- I couldn't resist the temptation.

STAFF DEVELOPMENT: AN ANNOTATED BIBLIOGRAPHY

Gary A. Griffin Research and Development Center for Teacher Education The University of Texas at Austin January 1982

Barnes, S. Synthesis of selected research on teaching findings.
Austin: The Research and Development Center for Teacher Education,
The University of Texas at Austin, 1981.

This publication considers the research on teaching findings as potential content for staff development. Using the major studies of the past decade as data source, Barnes notes strengths and liabilities of the studies (conceptual and methodological) in terms of their power to improve teacher effectiveness if included in a systematic staff development strategy. The studies discussed are also classified according to their original student, subject matter, and grade level variables. A profile of the "effective teacher" is provided based upon the cited research findings.

Barth, R. Open education and the American school. New York: Agathon Press, 1972.

This case study of an attempt to implement open education in an urban setting by university-based educators and graduate students illustrated the need for staff developers/change agents to be aware of and act upon understandings aderived from the educational and civic communities. This study strongly supports the position that the school and its immediate society are intimately connected and that connection is influential upon school-based ideologies and practice.

Bentzen, M. Changing schools: The magic feather principle. New York: McGraw-Hill. 1974.

One of a series of volumes which describes the 5-year study of educational change supported by the Institute for the Development of Educational Activities, this book reports an apparent positive relation between, among others, two processes and receptivity to chamge. In schools where teachers and principals were most likely to effect meaningful change, it was noted that school persons engaged in dialogue, decision-making, action, and evaluation (DDAE). It is hypothesized that DDAE is a prerequisite to change. The second process, the peer group strategy, is based on the assumption that most (if not all) of the resources for facilitating change are present in any given school setting. These two processes, DDAE and the peer group stratagy, are seen as interactive.

Berman, B., & Friederwitzer, F. A pragmatic approach to inservice education. Action in Teacher Education, Vol. 3, No. 1, p. 51-58, Winter-Spring, 1981.

Preceded by an overview of propositions and critiques of staff development strategies and assumptions, a specific model is introduced and discussed. Although the consequences of the model are determined from an evaluative (rather than research) stance, the model incorporates several elements which are common to many proposals for staff development: voluntary participation,

teacher-administrator teams, attention to adult developmental theory, use of teachers as trainers, released time for participants, and focus upon individual school settings.

Berman, P., & McLaughlin, M. Federal programs supporting educational change, Vol. IV: The findings in Review. Santa Monica, CA.: The Rand Corporation, 1975.

Typically known as "The Rand Study," this major inquiry lists the consequences of Federal programs designed to promote educational innovations and provides the staff developer with a set of principles which can be inferred to be related to positive outcomes. The concept of implementation (idea into practice) is discussed at length and strategies for successful implementation are derived from post hoc analysis of cases. Among others, the study identified the following components of effective implementation: concrete teacher-specific training, in-class assistance, teachers observing other teachers, participative governance, local materials development, and teacher-administrator interaction in staff development. The study also legitimized the concept of mutual adaptation--a term used to describe the interaction of the school context with the proposed change.

Byrd, D. Do educational constituency groups agree on topics for professional development? Action in Teacher Education, Vol. 3, No. 1, p. 77-90, Winter-Spring 1981.

A survey of teachers, administrators, and teacher educators focused on perceptions related to needed staff development related to teacher skills. Results showed that administrators and teacher educators believed that teachers need greater skill in planning, diagnosis, instruction, classroom climate, and evaluation. Teachers did not report that they needed these skills to the degree that other respondents believed they do. Items related to the affective domain received high agreement as to need across respondent groups. This was also true for classroom con? ol items dealing with elimination of inappropriate student behavior.

Christensen, J. Professional Development: What do teachers think? <u>Action in Teacher Education</u>, Vol. 3, No. 1, p. 77-90, Winter-Spring 1961.

A survey polled teachers as to their perceived needs for staff development and their preference mode of delivery of that staff development. Results suggested that teachers responded to a large degree in a manner reflective of the expectations of the larger society, that a variety of delivery modes (dependent upon the content) is desirable, and that institutional collaboration is necessary to meet teachers' expectations.

Devaney, K., & Thorn, L. <u>Exploring teacher centers</u>. San Franciso, CA.: Far Mest Laboratory for Educational Research and Development, 1975.

Rooted in assumptions about collaboration, the nature of change, and the role of teachers in planning for their own professional development, the teacher center strategy has received widespread attention in the United States. The center movement appears to have resulted in broadened expectations for participants in terms of their own efficiency, their positive relations with

2



other educators, local problem solving, flexibility in the use of time for staff development, and a more central role for teachers as leaders.

Edwards, S. Changing teacher practice: A synthesis of relevant research.

Austin: The Research and Development Center for Teacher Education, The University of Texas, 1981.

This publication presents the findings of major studies of school and teacher change as a means to infer guidelines for conducting inservice teacher education programs. The review of findings of the studies illustrates similarities and differences, notes problems of interpretation, and speculates on the ways in which the findings can be transforred from descriptions of practice to prescriptions for staff development. Attention is given to the function of context in school improvement.

Emmer, E., Sanford, J., Evertson, C., Clements, B., & Martin, J. <u>Classroom management improvement study:</u> An experiment in elementary school classrooms. Research Report No. 6050. Austin: The Research and Development Center for Teacher Education, The University of Texas, 1982.

The Classroom Management Improvement Study (CMIS) was an experimental study designed to determine the effects of a staff development strategy aimed at teaching inservice elementary teachers those management behaviors which had been shown in prior research to be associated with higher-than-predicted pupil outcomes as measured by standardized tests. The intervention for treatment teachers consisted of a prior-to-school workshop, a manual of teaching prescriptions and related supportive material, and a reinforcement workshop after four weeks of school. Extensive observations using both rating scales and narrati/e descriptions demonstrated significant differences between treatment and control teachers. This study demonstrates that teacher management behaviors can be changed with relatively minimal intervention.

Good, T. <u>Classroom research: What we know and what we need to know</u>. Austin: The Research and Development Center for Teacher Education, The University of Texas at Austin, 1982.

This major review of research on teaching and learning in school settings provides a comprehensive discussion of both observational and field experiment studies. The review can be examined in terms of content for staff development (e.g., what teaching strategies are associated with higher-than-expected pupil outcomes) and for <u>processes</u> of staff development (e.g., how field experiments were conducted in order to promote the use of effective teaching behaviors).

Griffin, G., & Lieberman, A. <u>Behavior of innovative personnel</u>. Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1974.

This paper reviews landmark studies of leadership, qualities of innovativeness, and change agents as a means of deducing what behaviors might be associated with innovative school efforts. The principal contribution the review makes to staff development is the research-derived set of professional characteristics which could be assumed as basis to the staff developer's repertorie (e.g., self-awareness, sharing decisions, knowledge of the change process, cosmopolitanism, action upon subsystems, gradualism, etc.).

Griffin, G., Hughes, R., Jr., & Martin, J. <u>Knowledge, training, and classroom management</u>. Austin: The Research and Development Center for Teacher <u>Education</u>, The University of Texas at Austin, in press.

This study inquired into the relation among the knowledge teachers have regarding classroom management, a training program focused on management, and teachers' management behavior. As part of the Classroom Management Improvement Study (Emmer, et al., 1982), treatment and control teachers completed a questionnaire prior to participation in the study. The questionnaire was designed to determine teachers' entry knowledge of classroom management behaviors to be used in a staff development effort. It was found that treatment and control teachers' knowledge of classroom management did not differ significantly prior to treatment but their behaviors, subsequent to treatment, did. These findings support the use of staff development activities as focusing or orienting activities as well for more typical knowledge utilization purposes.

Gross, N., Giacquinta, J., & Bernstein, M. Implementing organizational innovations. New York: Basic Books, 1971.

This now-classic case study of an attempt to significantly alter the role of the teacher to one of facilitator ('catalyst') of learning provides the staff developer with a set of understandings which can guide his/her work. Conclusions relate to the need for supportive leadership, commitment, assistance, clarity of understanding, support materials, and organizational commatability.

Hall, G. The concerns-based approach to facilitating change. Educational Horizons, Vol. 57, No. 4, pp. 202-208, Summer 1979.

The developmental concept Stages of Concern (SoC) is presented and its implications for staff development and its implications for staff development are proposed. Emerging from ongoing large-scale studies of educational change, SoC proposes seven stages through which users proved when making changes: awareness, informational, personal, management, consequence, collaboration, and refocusing. Using an extensive data base to inform the discussion, the author suggests interventions (staff development approaches/strategies) for use with persons at the various stages of the model.

Hall, G., & Loucks, S. Program definition and adaptation. <u>Journal of Research</u> and Development in Education, Vol. 14, No. 2, pp. 46-58, 1981.

The concept "innovation configuration" is suggested as a means to examine, explain, and act upon different ways users adopt an innovation. Based on extensive research (The Concerns-Based Adoption Model), the term (and attendant procedures) is promoted as a decision-making tool for the planning, implementation, and evaluation of staff development programs associated with adoption of innovations.

Hall, G., Loucks, S., Rutherford, W., & Newlove, B. Levels of use of the innovations: A framework for analyzing innovation adoption. <u>Journal of Teacher Education</u>, Vol. XXVI, No. 1, p. 52-56, Spring 1975.

3

Levels of Use (LoU) of an innovation are described as a way to understand how teachers (and others) behave in terms of adopting new behaviors, materials, methods, etc. Eight levels, hypothesized as being developmental, are proposed: non-use, orientation, preparation, mechanical use, routine use, refinement, and renewal. For each level, categories of related behavior are noted. Although LoU are not tied directly to staff development activities per se, this component of the Concerns-Based Adoption Model offers a carefully designed guide to speculating on appropriate interventions as a consequence of a person's (or peoples') LoU placement.

Hord, S., Thurber, J., & Hall, G. Helping administrators change: Tools for leadership. The Developer, May 1981.

The Concerns-Based Adoption Model is discussed in its relation to providing theoretical and practical guidance to leaders in school situations. Essentially a case study of staff development for administrators, this report represents a deliberate attempt to actualize the proposal that the "principal is a key agent for change" and provides anecdotal data-illustrating the consequences of an inservice program for administrators.

Joyce, B., & Showers, B. Transfer of training: The contribution of 'coaching'. Journal of Education. Boston: Boston University, Vol. 163, No. 2, pp. 163-172, Spring 1981.

Largely inferential and speculative, this synthesis of research on training suggests the common-sense proposition that coaching (i.e., observations and feedback in an actual educative setting) increases the positive outcomes of a professional development strategy. Extending the typical variety of staff development approaches, the authors argue for coaching as more powerful than theory understanding, observations, and clinical practice.

Little, J. School success and staff development: The role of staff development in urban desegregated schools. Boulder: Center for Action Research, Inc., 1961.

A report of a study of staff development in three elementary and three secondary schools, this document presents findings related to the ways teachers "learn on the job" and the interaction of staff development, teacher behavior and beliefs, and the characteristics of the school as a workplace. Schools were characterized as high to low success and high to low collegial interaction. Findings speculates on the role of the principal as critical to professional collegiality, the positive effects of principal-teacher teaming, the importance of teacher involvement as an antecedent to school success, and the overall power of the school setting characteristics to influence both staff development efforts and school success.

Medley, O., Coker, H., Coker, J., Lorentz, J., Soar, R., & Spaulding, R. Assessing teacher performance from observed conpetency indicators defined by classroom teachers. <u>Journal of Educational Research</u>. Washington, D.C.: American Educational Research Association, Vol. 74, No. 4, pp. 197-216, March-April 1981.

A major issue for staff development programs which focus on specific

teacher competencies is the one of assessment. This meticulous study attempted to use existing observation schedules to measure competencies identified by teachers as important ones. By constructing keys believed to be reflective of the competencies, the researchers tested across instruments to determine reliability. Results were positive for a number of competencies and unstable for others.

Penfield, E. Faculty development and the teaching of writing: A local adaptation of the BAWP model. E.D.R.S., 1979.

This faculty development project reinforces the use of a single school as the focus of teacher growth. Elements of the strategy include school selection, teachers as principal resource persons, workshops, demonstrations, and prepost-evaluation procedures. The strategy appears to be related to improved student achievement and positive teacher behaviors.

Sarason, S. The culture of the school and the problem of change. San Francisco: Jossey-Bass, 1972.

The contribution of this volume to staff development is, in large part, the conceptualization and acknowledgement of "business as usual" when seen from a new and fresh perspective. The concept of "institutional regularities" to describe the dailiness of schooling, the isolation of the teacher from other adults, the communications gap which characterizes so many schools, the school-community value differences -- all these help the staff developer better understand his/her work environment.

Stallings, J. What research has to say to administrators of secondary schools about effective teaching and staff development. <u>Creating conditions for effective teaching</u>. Eugene, OR: University of Oregon, 1981.

Drawing extensively upon effectiveness research as it relates to teaching, Stallings reports the consequences of a staff development effort in secondary schools. Likening the model to Bloom's (1976) Mastery Learning Model, she prescribes a four stage strategy: pretest (observe, assess, begin where teachers are); inform (linkage of theory and experience to practice); organize and guide practice (acknowledge, support, encourage change and provide feedback); and posttest (observe and provide feedback to teacher and trainers). The model was shown to be effective in promoting change for treatment teachers in 25 out of 31 variables.

Tikunoff, W., Ward, B., & Griffin, G. <u>Interactive research and developendent on teaching: Final report.</u> San Francisco: Far West Laboratory for Educational Research and Development, 1979.

This research report discusses the implementation of an action-research related strategy whereby school problem-solving is engaged in by teams composed of teachers, a researcher, and a trainer/developer. Designed to engage school persons in attaching situation-specific issues, the strategy includes essential elements for implementation, guidelines for conducting research and development, and criteria for evaluation of products of the efforts. As a staff development intervention, IRADT resulted in benefits related to personal/professional orientations, contexts, pedagogy and knowledge, and utilization/production.

6

Urick, R., Pendergast, D. & Hillman, S. Preconditions for Staff development.

<u>Educational Leadership</u>. Washington, D. C.: The Association for Supervision and Curriculum Development, Vol. 38, No. 7, pp. 39-49, April 1981.

Brawing upon research findings from several major studies of change, the strategy presupposes three school conditions necessary for effective staff development: awareness, readiness, and commitment. These conditions, development to be interactive, form basic strategic concepts which guide the "ARC Workshop" which is designed to promote risk-taking, willingness to "ARC workshop" which is designed to promote risk-taking, willingness to participate in staff development activities, and commitment to personal and school improvement activities. The strategy appears to be most effective when introduced into a single school context.

Ward, B. An expanded view of the student outcomes that are built or restrained by teaching processes and structures. In Carter, H. (Ed.). Changing teacher practice. Austin: The Research and Development Center for Teacher Education, The University of Texas at Austin, in press.

A major problem for staff development efforts is the determination of what constitutes "good" staff development. Ward considers it necessary and desirable for teacher educators (e.g., staff "evelopers) to adapt from economics the construct of indicators to suggest success. Arguing that schooling is long-term and cumulative and, consequently, it is difficult to determine predictive short-term effects, she proposes that teaching effectiveness (and, hence, staff development effectiveness) be judged by (1) agreement between teacher intent and student understanding of what is to be accomplished (2) congruence between schooling goals and the student participation requirements of the classroom, (2) use of time in the classroom, (4) students' accomplishments, and (5) students' views of themselves and others.

